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JP 2-225382

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L8: Entry 37 of 150 File: JPAB Sep 7, 1990

PUB-NO: JP402225382A
DOCUMENT-IDENTIFIER: JP 02225382 A
TITLE: CERAMIC-BONDING MATERIAL AND CERAMIC-BONDING METHOD USING THE SAME

PUBN-DATE: September 7, 1990

INVENTOR-INFORMATION:

| NAME | COUNTRY |
|---|---|
| KAWAKAMI, MICHIKO | |

ASSIGNEE-INFORMATION:

| NAME | COUNTRY |
|---|---|
| ASAHI OPTICAL CO LTD | N/A |

APPL-NO: JP01305550
APPL-DATE: November 24, 1989

INT-CL (IPC): C04B 37/00

ABSTRACT:

PURPOSE: To obtain the title bonding material suitable for using as a biomaterial by adding a specific filler to an aqueous solution of a water-soluble polymer.

CONSTITUTION: Powders of starting substances for ceramics selected from apatite, tricalcium phosphate and calcium phosphate are dried by atomizing to obtain a filler of 0.1 to 15μm average particle size. Then, 5 to 40wt.% of the filler is added to an aqueous solution containing 0.5 to 20wt.% of one or more water soluble polymers selected from methyl cellulose, CMC, hydroxyethylcellulose, PVA, polyacrylic acid, polyacrylamide, polyoxyethylene oxide or the like to give the subject bonding material for ceramics. Then, for example, a couple of formed products A and B which are made of the same kinds of ceramics materials and have an equal level of firing shrinkage is bonded using the bonding material and fired.



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L5: Entry 62 of 77 File: DWPI Jul 16, 1990

DERWENT-ACC-NO: 1990-258279
DERWENT-WEEK: 199034


TITLE: Biological ceramic part material prepn. - comprises preparing compact body slurry, preparing porous body slurry, pouring slurries in mould without mixing, drying and sintering

INVENTOR: FUKUDA, H; HAKAMATSUKA, Y ; IRIE, H

PATENT-ASSIGNEE:

| ASSIGNEE | CODE |
|---|---|
| OLYMPUS OPTICAL CO LTD | OLYU |

PRIORITY-DATA: 1989JP-0000935 (January 6, 1989)

PATENT-FAMILY:

| PUB-NO | PUB-DATE | LANGUAGE | PAGES | MAIN-IPC |
|---|---|---|---|---|
| JP 02182261 A | July 16, 1990 | N/A | 000 | N/A |

APPLICATION-DATA:

| PUB-NO | APPL-DATE | APPL-NO | DESCRIPTOR |
|---|---|---|---|
| JP02182261A | January 6, 1989 | 1989JP-0000935 | N/A |

INT-CL (IPC): A61K 6/00; A61L 27/00

ABSTRACTED-PUB-NO: JP02182261A
BASIC-ABSTRACT:

A new prepn. of a biological ceramic part material comprises four processes: prepg. a slurry for compact body by mixing a ceramic powder with bio-affinity, water and a binder; prepg. another slurry for porous body by mixing a ceramic powder with bio-affinity, water, a binder and a foaming agent; pouring the two slurries in a mould in a two-layer form without mixing of the slurries and drying; and sintering the resulting material at a specified temp. after raising the temp. at a specified temp.

The ceramic powder is pref. one of alumina, zirconia, hydroxyapatite (HAP), and tricalcium phosphate. The raw ceramic powder is pref. heat-treated preliminarily at 900 deg.C to stabilise the powder, preventing the cracks formed during drying. A typical binder is an ammonium polyacrylate type deflocculant. A typical foaming agent consists of polyoxyethylene nonyl phenol and ethylene oxide. The sintering is done, e.g., by keeping at 350 deg.C for 1 hr. raising the temp. to 1100 deg.C at 100 deg.C/hr. and keeping to 1100 deg.C for 1 hr.

USE/ADVANTAGE - The material bonds well to bone tissue, without infection of germs.
ABSTRACTED-PUB-NO:

US 5135394A
EQUIVALENT-ABSTRACTS:

An extn. cavity filling element for prevention of alveolar ridge lowering

comprises an end portion of dense material which prevents bacterial entry into the cavity and is placed in contact with the gum. A second end is formed of a porous material for promotion of formation of bone tissue in the cavity and is adapted to be brought into contact with this tissue. The ends are both formed of beta-tricalciu m phosphate having affinity with living tissue and which can firmly bond to bond. The element is formed such as the ends are part of a unitary body. A method for forming thus element is provided. ADVANTAGE - Reliable prosthesis establishment results.

CHOSEN-DRAWING: Dwg.0/1ss Dwg.1/8

TITLE-TERMS: BIOLOGICAL CERAMIC PART MATERIAL PREPARATION COMPRISE PREPARATION COMPACT BODY SLURRY PREPARATION POROUS BODY SLURRY POUR SLURRY MOULD MIX DRY SINTER

DERWENT-CLASS: A96 D21 D22 E33 L02 P34

CPI-CODES: A12-V02; A12-W12G; D09-C01D; E31-K05C; E34-C02; E35-L; L02-G03A;

CHEMICAL-CODES:

Chemical Indexing M3 *01*
Fragmentation Code
A313 A540 A940 C108 C550 C730 C801 C802 C803 C804 C805 C807 M411 M782 M903 M904 M910 P913 Q453
Specfic Compounds
01521M 01544M
Registry Numbers
1327U 0502U

Chemical Indexing M3 *02*
Fragmentation Code
A220 A940 B115 B701 B713 B720 B815 B831 C108 C802 C803 C804 C805 C807 M411 M782 M903 M904 M910 P913 Q453
Specfic Compounds
01757M
Registry Numbers
1327U 0502U

Chemical Indexing M3 *03*
Fragmentation Code
A220 A940 B701 B713 B720 B815 B831 C101 C108 C550 C802 C804 C805 C807 M411 M782 M903 M904 P913 Q453
Specfic Compounds
03521M
Registry Numbers
1327U 0502U

UNLINKED-DERWENT-REGISTRY-NUMBERS: 1521U; 1544U ; 1757U

POLYMER-MULTIPUNCH-CODES-AND-KEY-SERIALS:
Key Serials: 0013 3002 0231 0409 1279 1588 1995 1996 2000 2002 2014 2022 2198 2200 2201 2682 2765 3316

Multipunch Codes: 014 028 04- 074 075 076 147 198 23& 231 236 24& 240 250 31- 334 336 359 43& 50& 54& 609 645 678 688 720 724 726

SECONDARY-ACC-NO:
CPI Secondary Accession Numbers: C1990-111926

Non-CPI Secondary Accession Numbers: N1990-200118

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| l7 not l5 | 150 |

**Database:** US Patents Full-Text Database; US Pre-Grant Publication Full-Text Database; JPO Abstracts Database; EPO Abstracts Database; Derwent World Patents Index; IBM Technical Disclosure Bulletins

Refine Search: `l7 not l5` Clear

## Search History

**Today's Date: 7/11/2001**

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| JPAB,EPAB,DWPI | l7 not l5 | 150 | L8 |
| JPAB,EPAB,DWPI | l6 and l2 and l4 | 180 | L7 |
| JPAB,EPAB,DWPI | $3calcium adj phosphate | 7160 | L6 |
| JPAB,EPAB,DWPI | l3 and l4 | 77 | L5 |
| JPAB,EPAB,DWPI | slurry or particles or powder | 1014211 | L4 |
| JPAB,EPAB,DWPI | l1 and l2 | 317 | L3 |
| JPAB,EPAB,DWPI | bond$3 or join$3 | 1222331 | L2 |
| JPAB,EPAB,DWPI | hydroxyapatite | 2871 | L1 |